CLAIM AMENDMENTS

<u>IN THE CLAIMS</u>

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1-14.   (Cancelled)

15.   **(Currently Amended)** A method for coding positions of data elements in a data structure <u>of a document and for transmitting said document</u>, the method comprising:

<u>coding said data structure of said document by</u>

associating position codes with the data elements in a pre-determined sequence, wherein the position codes are represented as rational numbers; and

selecting the position codes such that, if lengths of the position codes are unlimited, any desired number of new position codes may be allocated as positions for new data elements that are to be inserted between positions of two data elements in order to code positions of the new data elements within the data structure without changing the associated position codes<u>;</u>

<u>and</u>

<u>transmitting at least said new position codes</u>.

16.   (Previously Presented) A method for coding positions of data elements in a data structure as claimed in Claim 15, wherein at least one of a first position code and a last position code of the data elements is selected such that other position codes may be inserted at least one of before the first position code and after the last position code.

17.   (Previously Presented) A method for coding positions of data elements in a data structure as claimed in Claim 16, wherein at least one of the first position code is not equal to 0 and the last position code is not equal to 1.

18.   (Previously Presented)   A method for coding positions of data elements in a data structure as claimed in Claim 15, wherein the position codes include binary data.

19.   (Previously Presented)   A method for coding positions of data elements in a data structure as claimed in Claim 18, wherein the position codes include at least one data bit n-tuples and at least one extension bit, a quantity of the at least one extension bit corresponding to a quantity of the at least one data bit n-tuples.

20.   (Previously Presented)   A method for coding positions of data elements in a data structure as claimed in Claim 15, wherein the data structure forms part of a data tree.

21.   (Previously Presented)   A method for coding positions of data elements in a data structure as claimed in Claim 15, wherein the data elements include data codes for the data elements of a document.

22.   (Previously Presented)   A method for coding positions of data elements in a data structure as claimed in Claim 21, wherein the document is an XML document.

23.   (Previously Presented)   A method for coding positions of data elements in a data structure as claimed in Claim 21, wherein the data codes for the document are generated with an MPEG coding method.

24.   (Previously Presented)   A method for coding positions of data elements in a data structure as claimed in Claim 23, wherein the coding method includes a standardized MPEG-7 coding method.

25. **(Currently Amended)** A method for coding positions of data elements in a data structure <u>of a document and for transmitting said document</u>, the method comprising:

<u>coding said data structure of said document by</u>

associating position codes with the data elements in a pre-determined sequence, wherein the position codes are represented as rational numbers; and

selecting the position codes such that new position codes for new data elements may be allocated for inserting the new data elements between positions of two adjacent data elements so as to code positions of the new data elements within the data structure without changing the associated position codes, wherein at least one new position code is longer than a longest of the position codes of the two adjacent data elements<u>;</u>

<u>and</u>

<u>transmitting at least said new position codes</u>.

26. (Previously Presented) A method for coding positions of data elements in a data structure as claimed in Claim 25, wherein at least one of a first position code and a last position code of the data elements are selected such that other position codes may be inserted at least one of before the first position code and after the last position code.

27. (Previously Presented) A method for coding positions of data elements in a data structure as claimed in Claim 26, wherein at least one of the first position code is not equal to 0 and the last position code is not equal to 1.

28. (Previously Presented) A method for coding positions of data elements in a data structure as claimed in Claim 25, wherein the position codes include binary data.

29. (Previously Presented) A method for coding positions of data elements in a data structure as claimed in Claim 28, wherein the position codes include at least one data bit n-tuple and at least one extension bit, a quantity of the at least one extension bit corresponding to a quantity of the at least one data bit n-tuple.

30.   (Previously Presented) A method for coding positions of data elements in a data structure as claimed in Claim 25, wherein the data structure forms part of a data tree.

31.   (Previously Presented) A method for coding positions of data elements in a data structure as claimed in Claim 25, wherein the data elements include data codes for the data elements of a document.

32.   (Previously Presented) A method for coding positions of data elements in a data structure as claimed in Claim 31, wherein the document is an XML document.

33.   (Previously Presented) A method for coding positions of data elements in a data structure as claimed in Claim 31, wherein the data codes for the document are generated with an MPEG coding method.

34.   (Previously Presented) A method for coding positions of data elements in a data structure as claimed in Claim 33, wherein the coding method includes a standardized MPEG-7 coding method.

35.   (**Currently Amended**) A device for coding positions of data elements in a data structure _of a document and for transmitting said document_, comprising:

means for coding and transmitting said document, wherein said means are operable:

_to_~~parts for~~ ~~providing~~_associate_~~that~~ position codes ~~be associated~~ with the data elements in a predetermined sequence, wherein the position codes are represented as rational numbers;_ and_

~~parts for~~_to_ selecting the position codes such that, if lengths of the position codes are unlimited, any desired number of new position codes may be allocated as positions for new data elements that are to be inserted between positions of two data elements in order to code

positions of the new data elements within the data structure without changing the associated position codes.

36.   (**Currently Amended**)   A data transmission system for both coding and decoding position codes of data elements in a data structure <u>of a document and for transmitting/receiving of a document</u>, comprising:

a device for coding positions of the data elements in the data structure, wherein the device associates position codes with the data elements in a pre-determined sequence, wherein the position codes are represented as rational numbers, and selects the position codes such that, if lengths of the position codes are unlimited, any desired number of new position codes may be allocated as positions for new data elements that are to be inserted between positions of two data elements in order to code positions of the new data elements within the data structure without changing the associated position codes; and

a device for decoding the position codes of the data elements in the data structure<u>,</u>

<u>wherein the data transmission system is further operable to transmit a document for which said positions have been coded and to receive a document which is to be decoded</u>.

37.   (**New**)   A method for coding positions of data elements in a data structure of a document and for storing said document, the method comprising:

coding said data structure of said document by

associating position codes with the data elements in a pre-determined sequence, wherein the position codes are represented as rational numbers; and

selecting the position codes such that, if lengths of the position codes are unlimited, any desired number of new position codes may be allocated as positions for new data elements that are to be inserted between positions of two data elements in order to code positions of the new data elements within the data structure without changing the associated position codes;

and

storing at least said new position codes in said document.

38.   (New) A method for coding positions of data elements in a data structure of a document and for storing said document, the method comprising:

coding said data structure of said document by

associating. position codes with the data elements in a pre-determined sequence, wherein the position codes are represented as rational numbers; and

selecting the position codes such that new position codes for new data elements may be allocated for inserting the new data elements between positions of two adjacent data elements so as to code positions of the new data elements within the data structure without changing the associated position codes, wherein at least one · new position code is longer than a longest of the position codes of the two adjacent data elements;

and

storing at least said new position codes in said document.

39.   (New) A device for coding positions of data elements in a data structure of a document and for storing said document, comprising:

means for coding and storing said document, wherein said means are operable:

to associate position codes with the data elements in a predetermined sequence, wherein the position codes are represented as rational numbers; and

to select the position codes such that, if lengths of the position codes are unlimited, any desired number of new position codes may be allocated as positions for new data elements that are to be inserted between positions of two data elements in order to code positions of the new data elements within the data structure without changing the associated position codes.